

Claims

1. A device for removing sparks or other hot particles from a gaseous stream comprises a housing (10) with an inlet (12) and an outlet (14) for the gaseous stream and means for removing the sparks or other particles, characterized in that a bulk ceramic or mineral material is provided inside the housing in an inlet region facing the inlet (partition 20) and in an outlet region facing the outlet (partition 22), that the bulk material is arranged in the housing in such a way that the entire gaseous stream is forcibly guided through the bulk material, and that the path followed by the gaseous stream through the bulk material is determined in such a way, depending on the type and grain size of the material, that the gaseous stream is substantially free from sparks after the outlet region.
2. Device according to claim 1, characterized in that the material inside the housing is caught between two perforated, spaced-apart partitions (20, 22).
3. Device according to claim 2, characterized in that the space between the partitions (20, 22) has at least one closeable opening (openings 24, 26) for filling and emptying the space.
4. Device according to claim 3, characterized in that one closeable opening for filling and one closeable evacuation opening are provided.
5. Device according to at least one of claims 1 to 4, characterized in that the housing has at least one compressed air inlet (32) for cleaning purposes.
6. Device according to at least one of claims 1 to 5, characterized in that the housing has at least one water inlet.
7. Device according to claim 5 and/or 6, characterized in that the inlets open in the direction of flow into the housing (10) upstream or downstream from the space between the partitions.
8. Device according to at least one of claims 1 to 7, characterized in that the material has a microporous surface.
9. Device according to at least one of claims 1 to 8, characterized in that the material is expanded clay.
10. Device according to at least one of claims 1 to 7, characterized in that the material is gravel.

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11. Device according to at least one of claims 1 to 10,
characterized in that the material has a grain size of approximately 5 – 15 mm.

12. Device according to at least one of claims 1 to 10,
characterized in that the thickness of the bulk material in the direction of flow is
defined such that the duration of contact between the gas and the material is
between about 0.1 and 2 seconds.

[Fig. 1-8]